

Reg. No.:

First Year B.Sc Optometry Degree Supplementary Examinations
April 2019
Paper II – Physiology
(2016 Scheme)

Time: 3 hrs

Max marks: 80

- Answer all questions
- Draw diagrams wherever necessary
- Write section A and section B in separate answer books. Do not mix up questions from section A and section B.

Q P Code: 123013

Section A – General Physiology

Marks: 40

Essay:

1. Describe the mechanism of oxygen transportation from lungs to tissues by the blood.

Add a note on oxygen Hb dissociation curve and factors affecting it. (5+3+2)

Short notes:

(3x5=15)

2. Cardiac cycle
3. Define anemia. Give the etiological classification of anemia with example.
4. Pathway for pain from left leg

Answer briefly:

(5x2=10)

5. Show the innervation of urinary bladder.
6. List the functions of saliva.
7. Effect of hyper secretion of growth hormone in adult.
8. Clinical features of Parkinsonism.
9. List the hormones of adrenal gland

One-word answer:

(5x1=5)

10. Normal stroke volume
11. Normal residual volume
12. Partial pressure of carbon dioxide in arterial blood
13. Normal renal blood flow per minute
14. Pacemaker of the heart is

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Section B – Ocular Physiology

Marks: 40

Essay:

(10)

1. Explain the visual pathway from receptor to cerebral cortex. Describe the effect of lesion of optic pathway at different sites. (6+4)

Short notes:

(3x5=15)

2. Neural mechanism of light adaptation.
3. Accommodation reflex.
4. Photochemistry of vision

Answer briefly:

(5x2=10)

5. Define color blindness. Mention the types.
6. Functions of lens of eyes.
7. List the extrinsic ocular muscles.
8. Functions of tear
9. What is myopia. How it is corrected

One-word answer:

(5x1=5)

10. Normal intra ocular pressure is (specify the unit)
11. Neural centre for pupillary light reflex is situated at -----
12. The pigment present in cones -----
13. One popular theory for color vision
14. Refractive index of cornea is (specify units)
